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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,567	09/22/2003	Toshinori Okamoto	117229	6156
25944	7590	10/04/2004	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			NGUYEN, TUYEN T	
			ART UNIT	PAPER NUMBER
			2832	

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/665,567	Applicant(s) OKAMOTO, TOSHINORI	
	Examiner TUYEN T NGUYEN	Art Unit 2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art of figures 6-7 [AAPA] in view of Kobayashi et al. [US 2001/0025944 A1].

AAPA discloses a line filter [figures 6-7] comprising:

- a square-shaped ferrite core forms a closed magnetic path;
- at least first and second edgewise windings [611-614] which are formed respectively of first and second rectangular insulated wires, the first edgewise winding being provided around a core leg of the ferrite core and the second edgewise winding being provided around a core leg of the ferrite core located opposite to the core leg having the first edgewise winding provided thereabout; and
- input and output terminals [figures 6-7].

AAPA discloses the instant claimed invention except for the ferrite core formed of Mn-Zn which has an initial permeability of at least 3000 at 100kHz and at least 100 at 10MHz at room temperature.

Kobayashi et al. discloses Mn-Zn ferrite for magnetic core having an initial permeability of at least 3000 at 100kHz and at least 100 at 10MHz at room temperature with the main

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components include 44.0 to 49.8 mol % Fe_2O_3 , 15.0 to 26.5 mol % ZnO , 0.02 to 1.00 mol % Mn_2O_3 and the remainder MnO , and also include at least one of 0.010 to 0.200 mass % V_2O_5 , 0.005 to 0.100 mass % Bi_2O_3 , 0.005 to 0.100 mass % In_2O_3 , 0.005 to 0.100 mass % PbO , 0.001 to 0.100 mass % MoO_3 and 0.001 to 0.100 mass % WO_3 as additive.

It would have been obvious to one having ordinary skilled in the art at the time the invention was made to use Mn-Zn ferrite material of Kobayashi et al. in the core of AAPA for the purpose of improving performance.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Kobayashi et al. as applied to claims 1 and 3-4 above, and further in view of Kobayashi et al. [US 6,468,441 B1].

AAPA in view of Kobayashi et al. '25944 discloses the instant claimed invention except for the main component composition comprising of 0.1 to 3.0 mol % CoO .

Kobayashi et al. '441 discloses a Mn-Zn ferrite material for a magnetic core include 0.1 to 3.0 mol % CoO in the main component composition.

It would have been obvious to one having ordinary skilled in the art at the time the invention was made to include CoO in the Mn-Zn ferrite core of AAPA, as modified, as suggested by Kobayashi et al. '441 for the purpose of reducing mol % of Fe_2O_3 to less than 50 mol % and providing high frequency.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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- Ito et al. [US 6,767,478 B2] ; Kobayashi et al. [US 6,436,308 B2] ; Kallman [US 4,342,013] ; Kobayashi et al. [EPO 1 134 202 A1] and Kobayashi et al. [EPO 1 209 136 A1].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUYEN T NGUYEN whose telephone number is 571-272-1996.

The examiner can normally be reached on M-F 8:30-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ELVIN ENAD can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTN *TTN*

Tuyen T. Nguyen